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## Overview of the Current Food Security Crisis in Zambia

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► **To cite this version:**

Helen M Samatebele. Overview of the Current Food Security Crisis in Zambia. Food Security in Southern Africa. Causes and Responses from the Region, Mar 2003, Pretoria, South Africa. p. 89-108. hal-00793124

**HAL Id: hal-00793124**

**<https://hal.science/hal-00793124>**

Submitted on 7 Mar 2013

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# *Food Security in Southern Africa*

Causes and responses  
from the region

*Being the partial proceedings of a conference co-organized by  
the South-African Regional Poverty Network,  
Care-International and Ifas.*

*Held at Human Sciences Research Council (Pretoria), on the  
18 March 2003*

**Scott Drimie, guest editor for HSRC-SARPN**

**Michel Lafon, editor for Ifas**

Cahiers de l'Ifas is an occasional working paper published by Ifas, dedicated to disseminating research on social issues in Southern Africa.

Under the guidance of appointed editors, each issue covers a specific theme; papers originate from researchers, experts or students, local or not, with an interest in the region.

The views and opinions expressed here remain the sole responsibility of the authors.

Any query regarding this publication should be directed to the chief editor.

Institut Français d'Afrique du Sud, Johannesburg 2003

(Les Cahiers de l'Ifas n° 3)

ISSN : 1608-7194

Chief editor : Philippe Guillaume, director of Ifas-Research

Cover picture : Keyprint cc

The text herein presented as well as back issues of Cahiers de l'Ifas are available on IFAS website.

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# OVERVIEW ON THE CURRENT FOOD SECURITY CRISIS IN ZAMBIA

*Prepared by*

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## Acronyms

ASIP	Agricultural Sector Investment Programme
CFSAM	Crop and Food Supply Assessment Mission
CSO	The Central Statistical Office
DMMU	The Disaster Management and Mitigation Unit
EMOP	Emergency Operation
FRA	Food Reserve Agency
FSP	Food Security Pack
GDP	Gross Domestic Product
<i>GMO</i>	<i>Genetically Modified Organisms</i>
GRZ	Government of the Republic of Zambia
HIPC	Highly Indebted Poor Country
MACO	Ministry of Agriculture and Cooperatives
MT	Metric Tonnes
NEWU	National Early Warning Unit
OVC	Orphans and Vulnerable Children
PAM	Programme Against Malnutrition
PRSP	Poverty Reduction Strategy Paper
SHAPES	Small Holder Access to Processing, Extension and Seeds
VAC	Vulnerability Assessment Committee
VAM	Vulnerability Assessment Mapping

## 1.0 INTRODUCTION

### 1.1 Geography:

Zambia derives its name from the Zambezi River, which rises in the northwest corner of the country and forms its southern boundary. She lies between latitudes 100 and 180 South and longitudes 220 and 330 East. Zambia is landlocked, sharing boundaries with eight neighbours: the Democratic Republic of Congo to the north and northwest, Tanzania to the northwest, Malawi to the east. Mozambique to the southeast, Zimbabwe to the south, Botswana and Namibia to the southwest, and Angola to the west.

With a land area of 752,614 square kilometers and an estimated 75 million hectares of arable land. The overall land-person ratio is one of the smallest in Africa. Most of Zambia lies on a high plateau with an average height of 3,500 to 4,500 feet above sea level.

Zambia's vegetation is of the savannah type and over half the country is covered by trees, varying from the more open conditions in the south to tall dense woodlands in the north and northwest. These woodlands contain only hardwoods. Apart from minerals and forests, the country is also richly endowed with fish and wildlife resources.

The country's climate makes possible the cultivation of a wider range of crops: maize, tobacco, cotton, rice, wheat and groundnuts. One can also grow a variety of vegetables and citrus fruit, bananas, pineapples, mangoes, avocados and grapes. Tea, coffee and sugarcane are also grown.

## **1.2 The People:**

Zambia has a population of 9.3 million people with an annual growth rate of 2.3% (Central Statistical Office (CSO) 2000 Census of population). Zambia is a country of great diversity in terms of race, ethnicity, linguistic and religion. Such diversity provides an interesting blend of values, norms and cultural and spiritual traditions.

Zambia's cultural diversity derives from the fact that its people belong to over seventy tribes. The major tribes are: Lozi (Western Province), Bemba (Northern Province), Ngoni (Eastern Province), Tonga (Southern Province), Lunda (Luapula and Northwestern Provinces), and Luvale and Kaonde (Northwestern Provinces).

## **1.3 Economy:**

Zambia was economically prosperous at independence (1964), due to the thriving copper industry. Zambia has the potential to expand agricultural production. However, it is estimated that only 14% of total agricultural land is currently being utilized. Agriculture generates about 22% of Gross Domestic Product (GDP) and provides direct livelihood to more than 50% of the population. The agricultural sector employs 67% of the labor force and it is the main source of income and provides employment for women who make up 65% of the rural population. The sector is currently the main stay of the rural economy.

Zambia is one of the countries in the southern Africa sub-region faced with a food crisis attributed to a complex combination of unfavorable weather pattern, poor health standards and unfavorable socio-economic conditions and high prevalence of HIV/AIDS. The current crisis has been further compounded by reduced food production in the last two consecutive seasons (2000/2001 and 2001/2002) resulting in the country experiencing substantial deficits of the staple food.

Whilst weather and other exogenous factors may have limited the sectors' ability to grow, by and large, agricultural policies of the past, imposed limitations on growth prospects. The HIV/AIDS pandemic has also had some effect on agricultural production and productivity. Today about 80 per cent of Zambians live in income poverty and suffer from other deprivation such as little access to social services and poor quality of the services. Poverty is more prevalent in rural areas compared to the urban areas (83 percent and 56 percent respectively) but it has risen faster in urban areas lately due to failing industries and rising unemployment. Most of the rural poor are small-scale farmers followed by medium scale farmers. Their low productivity, which provides bare subsistence, largely explains their poverty.

## **2.0 THE POVERTY SITUATION:**

2.1 Today, Zambia is among one of the poorest nations in the world despite decades of political stability and freedom from conflict, it is in the same category as most war torn neighbours. The World Bank classifies Zambia as a Least Developed Country. The UNDP *Human Development Report 2001* ranks Zambia 143 out of 161 countries, having fallen consistently over the past years from 136 in 1996, to 142 in 1997, to 146 in 1998. Indeed, of 79 countries for which data is available between 1975 and 1997, Zambia is the only country where the value of the Human Development Index is lower than it was in 1975.

A look at the social indicators reveals a declining trend over time, clearly showing the worsening living conditions of most Zambians. Life expectancy is estimated at 37 years, compared to 42 years at the time of independence (1964) and 54 years at the end of the 1990s. Mortality rates are among the highest in the world. Infant Mortality Rate is 112/1000 live birth in 1999 and Maternal Mortality Rate is at 900/100,000 live birth. The HIV/AIDS pandemic is around 23% has contributed to the high death rates. The number of orphans has increased to over 600,000, while a significant proportion of school age (7-13 years) children are not in school (Kelly, 1999). Malnutrition rates for under fives are high with 53% stunting, 24% under weight and 5% wasting nationwide.

National household surveys conducted by the Central Statistical Office (CSO) in 1991, 1993, 1996 and 1998 use an income poverty line as a measure for poverty. According to the latest statistics, CSO estimates that 80% of the population have incomes below the minimum level determined by CSO. CSO further reveals that the percentage of people living in poverty increased from 70% of the population in 1991 to about 74% in 1993, decreased to 69%

in 1996 and then rose again to 73% in 1998. This measure only shows the proportions of the population that are income poor, but poverty has many other dimensions.

## **2.2 The Causes of Poverty**

Poverty has many root causes and is deep rooted in Zambia. The main reason for Zambia being poor is because of failed economic performance with average income being a third of the level at independence. Although income growth may not always remove poverty for everyone, Zambia cannot escape poverty under a stagnant economy with a growing population. Mining output (copper and cobalt) the driving force in Zambia's economy, declined for a long time, pulling down other sectors that depend on it. No major substitutes in agriculture, tourism and others came on stream. The Government with support from its cooperating partners has put into place various programmes to address the problems. However, these have been constrained by a) deepening poverty due to disappointing economic growth all be it that improvements have been experienced in the past two years, b) the HIV/AIDS epidemic, and c) political leadership that has lacked the financial resources to deal with crippling national debts and grapple successfully with the problems affecting ordinary citizens. The result is that almost all major social, economic and demographic indicators continued in the spiral of decline that began almost two decades ago.

The failing economy pushed Zambia into debt in the 1970s and 1980s in an attempt to sustain living standards, eventually creating a debt crisis that further entrenched poverty in the 1990s. It also led to reversals in gains attained earlier after independence in social development like education, health, water and infrastructure. The government of the day adamantly remained committed to free health and education but the reality caused by limited financing in a stagnant economy resulted in poor delivery.

Even with diminished resources, poverty would have been less in Zambia with better planning and, in particular, superior prioritisation of resources and good governance in general. This has not always been the case.

In the 1990s, the HIV/AIDS pandemic and other diseases has worsened the poverty situation a lot. At the time when resources were already low, HIV/AIDS has increased the disease burden beyond the individual level to adversely impact on the economics of the family, the health system, the working environment as well as human capital and many others

HIV/AIDS is ravishing Zambia. Like other countries in the region, it has lost large numbers of its young, productive people. The loss of life has affected



every aspect of society. Businesses have lost skilled workers, Government has lost a substantial proportion of the workers who provide vital social services such as doctors, nurses and teachers. The extended family, the heart of traditional coping mechanisms in times of stress, has been tested to the breaking point. It is estimated that 13% of all Zambian children are orphaned as a result of HIV one of the highest proportions on the continent. Ironically, the families that open their doors to take in these children now find themselves placed at higher risk. With more and more dependent mouths to feed, household food stores that might once have carried the nuclear family through seasonal shortages are now woefully inadequate. Household assets are sold as increasingly desperate families try to buy commercially available foods. Increased prices undercut the value of their purchases they pay more and get less. To survive, some engage in high risk activities increasing their risk of exposure to HIV and fueling the epidemic.

### **3.0 CURRENT FOOD SECURITY SITUATION**

#### **3.1 Background**

Zambia is dependent on one main staple food crop maize. Maize has a high yield potential when grown with the use of hybrid seed and fertilizer. For a long time (from independence in 1964) the government heavily subsidized the production of maize through input provision, credit, marketing and processing of maize. This led to some small-scale farmers who were growing other food crops like millet and sorghum to abandon them due to lack of incentives. Therefore, in Southern parts of the country in areas not suitable for maize production, the people are heavily dependent on maize for both household food security and cash. In the Western, Northern and Northwestern parts of the country more cassava and finger millet is grown which contribute to household food security.

Zambia on average produces what it can consume in terms of maize production in the region of 900,000 to 1,000,000mt per year. Unfortunately the food security situation in Zambia has deteriorated in the last 10 years and is closely linked to poverty situation. The agriculture sector in particular is facing serious challenges that have led to the country's inability of most households to procure food from own production and purchase. These underlying consequences include the following:

- The irrational supply of fertilizer and seed in the market.
- A pattern of insufficient, erratic and poorly distributed rainfall.
- Massive losses of cattle and draught power due to animal diseases like corridor.

- High interest rates caused by the Structural Adjustment Programme (SAP) which makes it impossible for commercial small-scale farmers to borrow money for food production.
- Lack of credit facility for small-scale farmers.
- Failure by the government to release funds to the Food Reserve Agency (FRA) to enable it to carry out its function of smoothing out shortages and storing for one season to the next.
- Prevalence of HIV/AIDS among farm populations.
- Poor extension services.
- Unsustainable farming practices that have degraded land and soils.
- Failure by government to invest in the agriculture and other social sectors due to external debt stock servicing of US\$6,898 million.

### **3.2 Cereal Crop Production Trends**

As stated above, Zambia depends on maize for its staple food whilst cassava, millet and sorghum contribute to the food basket in varying proportions. For the past ten years the cereal production figures have been declining due to the failed agricultural policies such as Structural Adjustment Programme (SAP), Agricultural Support Investment Programme (ASIP), drought, etc. Zambia which used to be a net exporter of maize to countries like the Democratic Republic of Congo in the 1970s and 1980s is now a net importer of maize and other cereals to meet national food requirements.

The decline in maize production over the last five years has been a major concern caused by a number of factors like poor and late input distribution, lack of credit, unfavourable weather conditions and in some cases loss of animals for animal drought power. These factors contributed to less areas planted for maize production.

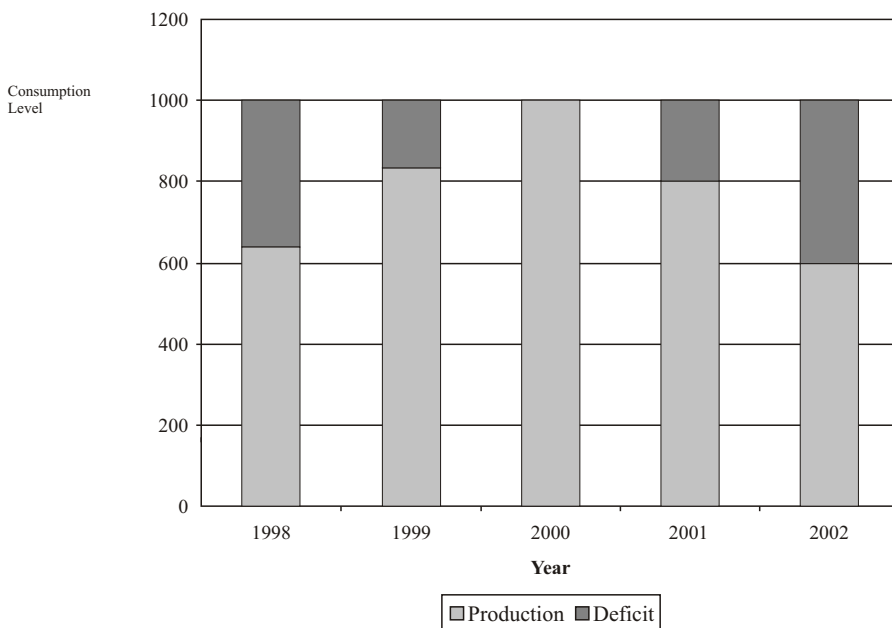
The country's Maize production for the 2001/2002 season reduced by 25% from 801,889 metric tones in 2000/2001 to 601,606 metric tones in 2001/2002. The 2001/2002 production was about 42 percent less than the 1999/2000's, which was a relatively normal year as far as weather conditions are concerned. See table 1 below.

**Table 1: MAIZE PRODUCTION OVER THE PAST THREE (3) SEASONS**

Province	2000	2001	2002	%Change 2002 from 2001	%Change 2002 from 2000
Central	156,318	162,272	130,655	-19	-16
Copperbelt	136,437	68,080	64,300	-6	-53
Eastern	284,511	196,317	202,385	3	-29
Luapula	15,422	14,998	15,714	4	2
Lusaka	63,957	58,127	48,355	-16	-24
Northern	41,311	43,496	38,022	-12	-7
North Western	21,149	19,196	19,558	2	-7
Southern	285,263	211,281	63,093	-70	-78
Western	48,437	28,120	19,525	-30	-59
<b>National Total</b>	<b>1,052,806</b>	<b>801,889</b>	<b>601,606</b>	<b>-25</b>	<b>-42</b>

Source: Final Crop Forecast Report 2002, MACO/CSO

**Maize Production From 1998 - 2002**



### 3.3 Cereal Crop Production Levels 2001/2002

The 2001/2002 agricultural season was very poor resulting in drought situations affecting the Southern half of the country which is the grain basket of the country. This drought sharply reduced crop yields by almost 40% of the anticipated harvest. Some small-scale farmers recorded little or no harvest at all. See Figure 1 showing Rainfall Departure Map for the 2001/2002 season.

The final crop forecast estimated the seasonal cereal production for the 2001/2002 agricultural season to be 742,194 Metric tonnes (MT) (608,806MT of maize; 54,416MT of sorghum/millet; 11,645MT of rice; and 74,527MT of wheat). With the winter production of 7,200Mt of maize and 70,000Mt of irrigated wheat, the season cereal production is therefore 744,867 recording a very slight increase from the initial estimates done in July 2002. It was estimated that the deficit of 600,000MT of cereal would need to be imported into the country to meet food needs.

The official maize commercial imports as of end of December 2002 have been estimated at 60,512MT. So far, 59,670MT of non-genetically modified maize (GMO) has been brought into the country in form of food aid while another 90,173MT is still expected (Table 2).

**Table 2: ZAMBIA Cereal Balance Sheet (May 2002 – April 2003 Marketing Year)**

	August 2002 <sup>1</sup>	December 2002 <sup>2</sup>	5 - Year Average <sup>3</sup>
Opening Stocks	23,000	23,000	
Domestic Production	738,000	744,867	1,095,000
<b>TOTAL AVAILABILITY</b>	<b>761,000</b>	<b>765,194</b>	<b>1,190,000</b>
Domestic Requirements	1,445,000	1,413,000	1,467,000
Unplanned Exports	10,000	10,000	14,000
Desired Closing Stocks	17,000		20,000
<b>TOTAL REQUIREMENTS</b>	<b>1,472,000</b>	<b>1,423,000</b>	<b>1,501,000</b>
<b>DOMESTIC CEREAL GAP</b>	<b>-711,000</b>	<b>-657,806</b>	<b>-311,000</b>
Commercial Imports Received**	0	60,512	111,00

Food Aid Received	46,000	120,182	182,000
<b>TOTAL IMPORTS RECEIVED</b>	<b>46,000</b>	<b>120,182</b>	<b>182,000</b>
Commercial Imports Expected	150,000	40,000	0
Food Aid Expected	132,000	90,173	0
<b>TOTAL IMPORTS EXPECTED</b>	<b>282,000</b>	<b>130,173</b>	<b>0</b>
<b>TOTAL IMPORTS UNFILLED</b>	<b>328,000</b>	<b>250,355</b>	
<b>CEREAL GAP</b>	<b>-383,000</b>	<b>-407,451</b>	<b>-129,000</b>

***\*\*The 60,512 consists of 10,481MT brought in by Sable Transport and 31MT by Hubert & Associates.***

***Source: Maize Importation Task Force***

***The Millers Association of Zambia has brought in 50,000MT through formal import.***

- ***SADC Regional Early Warning Unit Estimate, based on government figures.***
- ***National Early Warning Unit Estimate based on final Crop Forecast figures.***
- ***SADC Regional Early Warning Unit.***

### **3.4 Appeal to Respond to the Cereal Shortages**

Zambia is one of the countries in Southern Africa faced with a food crisis. The current crisis has been compounded by the fact that there has been reduced food production in the last two consecutive seasons (2000/2001 and 2001/2002) resulting in the country experiencing a substantial deficit of the staple food.

The Zambian Government declared a disaster in May 2001 and requested for external assistance from the donors. The United Nations Agencies (United Nations Development Programme (UNDP), World Food Programme (WFP), United Nations Children's Fund (UNICEF), Food and Agriculture Organisation (FAO) and World Health Organisation (WHO) produced the United Nations Emergency Consolidated Appeal (CAP) to address the Food Insecurity Crisis in Zambia in July 2002. The CAP sought funding of US\$71.39 million for emergency food assistance, and to boost the capacity of the UN to respond to pressing new needs in health, education, water and

sanitation, child protection and food production. In these sectors much of the assistance sought was for expansion or acceleration of ongoing programmes. The assistance would target 1.71 million beneficiaries affected by the food crisis in the rural sector with the distribution of 224,000MT of relief food.

The Zambia Emergency Food Security Assessment conducted by a collaboration effort involving Government, UN Agencies, NGOs and SADC officials estimated that 2.3 million people were in need of humanitarian assistance for the period August 2002 to March 2003. The worst affected were the rural vulnerable groups located in the Southern, Eastern, Central, Lusaka and Western Provinces including the elderly, child and female headed households, households keeping the disabled, the sick and widows not supported by other households. Significant numbers of these households contain orphans and other vulnerable children affected by the HIV/AIDS pandemic.

### **3.5 FOOD RELIEF PROGRAMME**

From August 2002, the Office of the Vice President, Disaster Management and Mitigation (DMMU) in collaboration with the WFP and other UN systems began to implement the Emergency Operation Programme (EMOP) which included the distribution of relief food and non-food items to the 43 disaster affected districts. The various NGOs already implementing development programmes in the targeted districts were invited to participate in the relief food distribution programme. Apart from the relief food, non-food various items e.g. agricultural inputs (seed, fertilizer and tools) were sourced for distribution to the affected farm families.

### **3.6 Commercial Import Progress**

There is a lot of uncertainty over the commercial maize importation in Zambia. Based on the August 2002 cereal deficit 742,192MT from the Ministry of Agriculture Food balance sheet, Government made plans to facilitate commercial maize importation. On June 2, 2002, the Government of Zambia signed a Memorandum of Understanding with the Millers Association of Zambia for maize importation to fill the deficit for the 2002-2003 consumption season. The millers were to import 300,000MT while Government was to bring in 155,000MT. As indicated in the balance sheet, the Millers have brought in 50,000MT as formal imports. However, there is strong evidence that the Millers have purchased substantial amounts of maize (above official imports) brought into the country through cross boarder trade with Tanzania and Mozambique, which had not been accounted for. Therefore, although the cereal gap appeared so large in the food balance sheet

when only official imports are considered, in reality the gap is much smaller and that is why there is no commercial shortfall in urban areas. The Millers have confirmed that they still have stocks to last up to February and beyond.

In the last few months, Government has been giving conflicting figures on what they intend to import towards relief and strategic reserves. As a result of conflicting pronouncements from Government, wrong signals were sent to the private sector. The private sector (Millers) feels that if Government imports large quantities of maize, it will depress market prices. These pronouncements could have also contributed to the sharp increases in maize meal prices.

Despite all these arrangements and pronouncements to bring in large amounts of maize, the government has only about USD10,000,000.00 set aside for maize importation. Given this amount, only about 40,000MT of maize could be purchased through the government arrangements assuming a landed price of over USD245/MT. Unless the government finds some extra funds, indications are that not more than 40,000MT could be imported through the government arrangements up to March 2003. The Ministry of Agriculture confirmed that contracts to bring the 40,000MT have already been signed. Information from Millers Association indicated that most millers are currently well stocked with maize. This was adequate to supply the urban market till the early harvest comes on the market in March 2003.

### **3.7 Food Aid Progress and Plans**

Generally the food aid pipeline has been very weak. Between August and December 2002, government sourced 46,347MT genetically modified free maize and 4,000MT of mealie meal. This comprises grain from local purchases (17,677MT) as well as from import (28,670MT). The NGOs have brought a combined total of 2,000MT of maize. During the same period multilateral donors through World Food Programme (WFP) imported 31,000MT. Therefore, the total relief food that has so far been sourced amounts to 77,347MT of maize grain and 4,000MT of mealie meal out of the estimated 224,000MT cereal requirement for the period August 2002 to March 2003. As at end of December only 27.5% of the requirement for the period August to December had been met through combined effort of WFP and the government. The WFP cereal pipeline for the period December 2002 to March 2003 is 90,173MT.

## **4.0 IMPACT OF THE CEREAL SHORTAGE**

### **4.1 Increased Vulnerability**

Agriculture employs over 70% of the rural population and therefore, any shocks to the sector will have direct impact on livelihoods of households. The various sources of primary income are crop sales, casual labour agricultural, livestock sales, and other non off farm activities (e.g. fishing, crafts, brewing etc). Because the season experienced drought, these income-generating activities were also affected thereby reducing household incomes greatly. Some households reported they had no income at all and also find it difficult to borrow from their community to meet food needs, thus the two consecutive years of drought have increased the vulnerability of the affected population. There is evidence of increased poverty due to loss of income, crops, livestock, etc.

### **4.2 Increase in Staple Food Prices and Markets**

Because of the poor harvest, the market price of the little available maize and imported maize prices shot up drastically during the months from August to December 2002. The rural areas prices of maize grain had sharply risen, relative to the urban areas during the months of November and mid-December. Similarly the price of mealie meal followed a similar trend but the input was evenly spread in urban and rural districts. The prices increases varied from 6% to over 50%. According to the Ministry of Agriculture and Cooperatives (MACO) maize production in the last season declined by 32% compared to the 5-year average. The rural price increases were compounded by the fact that there were very few traders that were prepared to take maize grain and mealie meal to the affected rural areas because the roads are bad and that the rural community could not afford to pay for the high maize price to cover traders' costs. The bottom line is the rural markets have continued having critical shortage of grain.

### **4.3 Livestock Prices**

Livestock contributes to wealth and is used to generate income for various requirements like food, education, medicals, etc. In most of the food insecure areas, the price of livestock went down as the season progressed. There was a desperate measure by households to sell off some livestock to raise income to buy grain. In Western Province for example the outbreak of Anthrax and Contagious Bovine Pluro Pneumonia (CBPP) further increased the prices compounded by the ban of livestock movement by government. This measure denied the affected areas from household income through the sale of livestock causing food insecurity at household level.



#### 4.4 Coping Strategies

When households are faced with shocks such as disasters they employ various coping strategies. For the affected areas the most common type of coping strategy is altering dietary intake. Over the past five months, period August to December 2002, 78% of the entire areas surveyed population reported *reducing the daily number of meals*. This is 13% higher than that reported in the August assessment conducted by Vulnerability Assessment Group (VAC). Other dietary-related coping strategies included *reducing the amount eaten at meal times* (72%) and *skipping an entire day without a main meal* (58%). Households are also relying more on wild foods than in normal years (38%).

The level of borrowing is also of concern, as this could lead to further perpetuation of livelihood strains beyond the immediate food crisis. Households tend to first rely on borrowing from friends and relatives (30%), followed by borrowing from non-family members (27% and borrowing from money lenders (5%).

**Table 3: Frequency of Selected Coping Strategies**

Type of Coping Strategy	% hhs engaged in each coping Strategy (August December)
Reduced number of meals	78%
Reduced amount at meal times	72%
Skipped entire day without food	58%
Reduced expenditure on alcohol and tobacco	57%
Increased consumption of wild foods	38%
Reduced expenditure on non-foods	34%
Beyond normal livestock sales	32%
Borrowed from friends and relatives	30%
Borrowed from non-family members	27%
Borrowed from money lenders	5%

*Source: Zambia Emergency Food Security Assessment Report, January 2003*

#### 4.5 Targeting Food Aid

In a country where 80% of the population is classified as living in poverty, the issue of targeting relief food to affected communities remains a big challenge. Presently Zambia has limited information of the demography and problems of vulnerable households which therefore causes problems of proper targeting during relief programmes. To register the vulnerable groups so that

they get the required daily rations according to WFP stands at 350gm per person per day of grain was a problem. The NGOs and local village committees entrusted with the distribution of relief food used various methods to distribute the relief food because the numbers of people requiring food continued to increase as the programme progressed. Since the relief food was not enough to meet the target beneficiaries due to shortages, compounded by the fact that the government refused the GMO maize brought into the country by WFP, efforts were made to prioritise groups that were the most vulnerable in the community such as the chronically ill, women and elderly persons. Of the planned relief requirements, only 11% of the requirements were received by December 2002.

#### **4.6 Education**

The number of school dropouts stands at 16% mainly due to parents' mobility to afford school costs. This is worsened by the critical hunger situation that forces children into casual labour to earn food and cash, or fetch water, firewood, etc. In some cases children are too weak to cover long distances to school because of hunger. School feeding programmes are not in place to provide supplementary meals to school going children.

#### **4.7 Health and Nutrition**

The health and nutrition status of Zambia's people has been in decline for at least two decades. The government struggles to provide basic drugs and services. Increased hunger reduces people's ability to fight diseases. The HIV/AIDS, a new challenge, is affecting all population groups in the country. For most, the drugs and health care they need to cope with HIV/AIDS, T.B, malaria and the opportunistic infections they suffer from are simply unavailable. The sick and dying seek shelter within the extended family and in so doing, undermine the capacity of those families to cope with the food deficit crisis.

Although the malnutrition rates among the children under 5 years have not significantly increased during the food deficient months, this could be attributed to some coping mechanisms that the households apply during disasters, e.g. depending on wild foods, mothers denying themselves food so that their children have something to eat.

There is a relationship between HIV/AIDS and food security. According to Vulnerability Assessment Committee (VAC) findings, the following relationships:

- Pressure to seek alternative incomes makes people vulnerable to infections. For example in some border towns with minimal options for income sources, some women can be forced into prostitution.
- The impact of HIV/AIDS on household labour availability affects production or income where household labour is in short supply it means that the food production is reduced, that's contributing to food insecurity.

#### **4.8 Loss of Seeds**

Rural small-scale farmers depend on informal seed supply systems for inputs like seeds. Normally the households reserve some of the seeds from own harvests to plant the following season. When drought strikes there is loss of seed reserves as the family consumes even seed stocks in an effort to prevent starvation. There are also instances where families who receive relief grain such as maize select and then reserve such grain for planting the following season. The result of this practice is a poor crop and seed for the next season leading to household food insecurity.

### **5.0 LESSONS LEARNT/POLICY RECOMMENDATIONS**

#### **5.1 Crop Diversification**

In Zambia, rural livelihoods depend on crop production for both food security and income. The continued reliance on one main crop i.e. maize for household and national food security has caused food crises when faced with shocks such as droughts.

It is therefore, imperative to promote crop diversification programmes in order to broaden the food base so as to mitigate loses in times of drought. Crop diversification programmes being implemented by many NGOs such as Programme Against Malnutrition (PAM) for example have been successful in improving household food security among its target beneficiaries. The PAM projects such as the Food Security Pack (FSP) and Small Holder Access to Processing, Extension and Seeds (SHAPES) target small-scale farmers by promoting the distribution and planting of a variety of crops such as sorghums, millets, legumes, planting materials cassava and sweet potatoes at household level. The projects have recorded good successes because even during the drought years households growing a variety of crops have been able to have good harvests despite the drought.

It is recommended that crop diversification should be promoted in the country to help improve food security especially among small-scale farmers. Zambia should promote other main food crops like cassava which has the potential to give high yields even in poor rainfall areas.

## **5.2 Access to Opportunities**

Rural households have low access to opportunities that will help them develop a more secure livelihood. They cultivate very small land less than 1 hectare because of limited draught power, have no access to credit, not exposed to improved agricultural technologies to improve productivity, etc. The result is that the household incomes in non-drought years are too low to meet basic needs adequately or build up savings, assets or necessities. Such households are equally unable to withstand any external shocks such as droughts.

The government, NGOs and the private sector must provide opportunities for rural communities to engage in other alternative livelihood ventures to create incomes so as to build up resources to sustain livelihoods in times of shocks.

## **5.3 HIV/AIDS**

The household labour availability is a major concern, particularly for households affected by HIV/AIDS. The loss of heads of households or productive age adults prematurely, or where women are required to look after the chronically sick reduces the ability of the households to process enough food or bring income into the household. The result is increased household food insecurity and poverty.

Rural communities are being affected by HIV/AIDS and are responding to this in various ways. It is therefore, recommended that community support systems must be strengthened to help cope with the situations. There is need to get more information on the impact of HIV/AIDS on rural livelihoods. This would help agriculture and rural development programmes to design interventions that would properly address this problem.

## **5.4 Coping Strategies**

Rural households employ different types of coping strategies during stress periods. These are being employed during the current food crisis as the food relief being distributed is grossly deficient to meet the households' needs. Although there are no official loss of lives due to food shortages so far, probably due to coping strategies, the effect on health and nutrition is being felt.

The food relief programme currently in place is addressing the access of food, however, apart from food, households require money to buy other essential commodities like soap, salt, pay for medicals, etc. It would be worthwhile to employ different types of assistance such as cash for work and other public work schemes in such areas so that families can get access to income to subsidise their households' incomes and lessen the practice of selling off produce, assets such as animals, farm implements that are so essential for rural livelihoods' sustainability. There is need to have a better understanding of vulnerability in Zambia and coping strategies so that appropriate interventions are designed so that local coping strategies are not lost.

### **5.5 National Early Warning Systems**

Timely crop forecasts are essential to plan for any impending disaster situation. In the Zambian case, the Crop Forecasts Assessments and Needs Assessments were done rather late due to funding problems. This delayed the quick response and mobilization of relief resources for targeted areas. Since Zambia a landlocked country, all relief resources have to pass through neighbouring countries competing with other commercial imports, it is very unlikely that some of the relief food still in the WFP pipe will reach the designated areas on time.

It is essential to strengthen the government's Monitoring Systems such as Crops, Nutrition, Health and Meteorological Surveillance. In addition the Disaster Preparedness should be given a priority by the government to prevent late response to disasters and avert hardships experienced by targeted beneficiaries of humanitarian assistance. A National Disaster Management Policy should be developed to guide government and various stakeholders during disasters.

### **5.6 Strategic Food Reserves**

National food reserve is essential to mitigate any impending food shortages be it from droughts or other calamities. Unfortunately in Zambia the Food Reserve Agency (FRA) has not lived up to its name. Because FRA has not been properly funded, the Agency has not been able to build up food reserves to mitigate the food shortages resulting in increase in the staple maize prices.

It is, therefore, essential that the FRA should have sufficient food stocks at all times to help mitigate and stabilizing food prices during disasters. It would also prevent damping of commodities like maize and other commodities and hence protect the country from unfair trade practices that would affect Zambian farmers.

## **6.0 IMMEDIATE OUTLOOK**

Zambia faces another extremely challenging year. After the difficulties experienced in the 2001/2002 season, the year end economic indicators point that inflation is at 26%, the Kwacha has lost by 14% and a budget deficit. The Department of Meteorology issued a detailed rainfall forecast for the current (2002/2003) growing season. The forecast is that the northern half of the country will receive normal to above normal rainfall whilst the southern half will receive normal to below normal rainfall. The moderate El Nino will affect Zambia especially the southern half. At the beginning of the 2002/2003 season, rains have been erratic especially in the southern half of the country resulting in delayed planting and withering of crops due to insufficient rainfall. There are also concerns of reduced crop areas planted due to insufficient seed availability. If a significant reduced harvest did eventuate, another humanitarian crisis in the current drought affected areas would follow. This situation needs close monitoring and contingency plans to avert another disaster. See Figure 2 showing Rainfall Departure Map, 2002/2003 season.

## **7.0 CONCLUSION/THE WAY FORWARD**

The current food crisis being experienced in Zambia is not new and is becoming more frequent. It means that food security issues are not being properly addressed so as to prevent their frequent occurrence.

There is need to have food security policy that will guide government in developing and implementing strategies that would lead to the achievement of household and national food security. The agriculture sector should be the driving force towards the achievement of food security and, therefore, the government must prioritise funding the sector during the implementation of the Poverty Reduction Strategy Paper (PRSP) Programme. It will take a lot of political will on the part of government to achieve food security. All stakeholders should collaborate in contributing towards Zambia's food self sufficiency.

Fig.1: Rainfall Departure Map: Below, Normal and Above Normal Cumulative Rainfall (July 1, 2001 to April 20, 2002)

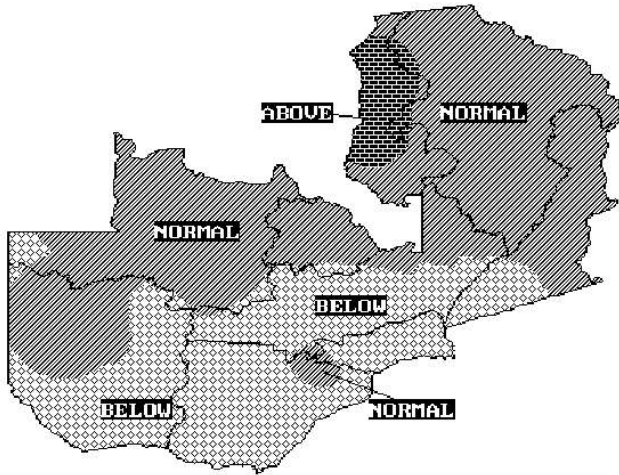
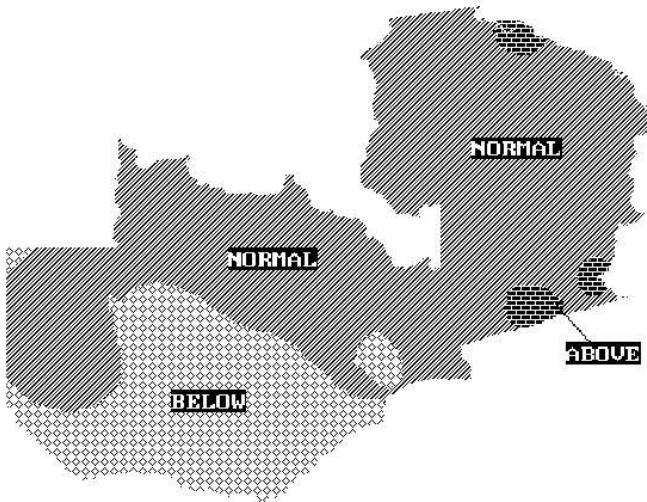


Fig.2: Rainfall Departure Map: Below, Normal and Above Normal Cumulative Rainfall (July 1, 2002 to February 10, 2003)



## REFERENCES

- 1999/200 Agricultural Statistics Bulletin, by Database Management and Early Warning Unit, Department of Planning and Cooperatives Development, Ministry of Agriculture and Cooperatives.
- Civil Society and Poverty Reduction Process in Zambia, prepared for KEPA (Service Centre for Development Co-operation) April 2002 by Mwene Mwinga (Dr).
- Crop Weather Bulletins by Meteorological Department.
- Final Crop Forecasting Report 2002, MACO and CSO.
- Land and Agriculture, from UNCED, Rio de Janeiro 1992 to WSSD, Johannesburg, 2002.
- Sustainable Agriculture/Rural Development and Vulnerability to AIDS Epidemic: FAO and UNAIDS Joint Publication, UNAID Best Practices/Collection, December 1999.
- Successful Experiences that have contributed to Household Food Security in Zambia, by Mubanga Mushimba, Ministry of Agriculture and Cooperatives.
- Taking the Campaign to the People, Debt Cancellation for Poverty Eradication, Reports from Provincial Visitations, Conducted by the Jubilee Zambia Secretariat Team, May June 2002.
- Third Country Training Programme Poverty Reduction through Rural Development Activities (Regional Development Good Practices Cases), Country Paper, January 2002 by Helen Samatebele and Bwalya Chilufya.
- Targeted Food Security Pack for Vulnerable but Viable Farmers in Zambia, 2001 2005. Agricultural Seasons Inception Report by Ministry of Community Development and Social Services, Ministry of Agriculture, Food and Fisheries.
- Zambia: Draft Proposal for Reducing Hunger by the year 2015, Lusaka, December 2000 by Patrick Nkandu.
- Zambia Emergency Food Security Assessment: Zambia National Vulnerability Assessment Committee in collaboration with the SADC,
- FANR, Assessment Committee, January 2003, Lusaka.
- Zambia Poverty Reduction Strategy Paper, 2002 2004, Ministry of Finance and National Planning, May 2002.